

I claim

A ~~CLAIMS~~

1. A method of manufacturing a liquid crystal display having a liquid crystal sealed between first and second substantially parallel spaced transparent plates which form an operative area of the display, comprising ^{The steps of} removing an excess region of a pre-manufactured liquid crystal display by cutting the first and second plates to isolate the excess region of the first and second plates and to expose cut edges along the operative areas of the first and second plates.
2. A method, as in Claim 1, including cutting the first and second plates at an oblique angle.
3. A method, as in ^{claim 1} ~~Claims 1 or 2~~, including removing the excess region of the pre-manufactured liquid crystal display by forming a first groove in the first plate of sufficient depth to isolate the excess region of the first plate, forming a second groove in the second plate of sufficient depth to isolate the excess region of the second plate, the second groove being substantially aligned with the first groove, and fracturing the first plate and second plate along their respective grooves.
4. A method, as in Claim 3, including forming the first and second grooves simultaneously.
5. A method, as in Claim 3 ~~or 4~~, including fracturing the first and second plates simultaneously along the first and second grooves.

6. A method, as in Claim 3, including fracturing the first plate along the first groove prior to forming the second groove in the second plate and fracturing the second plate along the second groove.
- a* 7. A method, as in ^{claim 3} ~~Claims 3 to 6~~, including fracturing each grooved plate by placing the other plate on a ridge substantially corresponding with the groove and applying pressure to the excess region.
- a* 8. A method, as in Claim 7 and wherein the liquid crystal display is placed on an apparatus comprising a fracturing platform having a first light ^{POLARIZING} ~~polarising~~ layer to ^{POLARIZE} ~~polarise~~ radiation emitted from a radiation source and a second light ^{POLARIZING} ~~polarising~~ layer located between a viewer's eye position and the liquid crystal display, including viewing the propagation of each fracture along its groove as an area against a contrasting background through the second light ^{POLARIZING} ~~polarising~~ layer.
- a* 9. A method, as in ^{claim 1} ~~Claims 1 or 2~~, including removing the excess region of the pre-manufactured liquid crystal display by cutting the first and second plates using a laser beam thereby isolating the excess region of the first and second plates and exposing the cut edges along the operative areas of the first and second plates.
- a* 10. A method, as in ^{claim 1} ~~any preceding claim~~, including freezing the liquid crystal between the first and second plates prior to cutting the first and second plates.

- a 11. A method, as in Claim 1 ~~or 2~~, including removing the excess region of the pre-manufactured liquid crystal display by freezing the liquid crystal between the first and second plates and machining through the first and second plates thereby isolating the excess region of the first and second plates and exposing the cut edges along the operative areas of the first and second plates.
- a 12. A method, as in ^{claim 1} ~~any preceding claim~~ and wherein conductive layers are adhered to the first and second plates and are electrically connected to driver connections, including cutting and removing any driver connection associated with the excess region prior to cutting the first and second plates.
- a 13. A method, as in ^{claim 1} ~~any preceding claim~~ and wherein a light polariser is adhered to at least one of the plates, including cutting and removing a narrow strip of each light ~~polariser~~ ^{POLARISER} in a region either side of where the cut edges associated with each plate is to be formed.
- a 14. A method, as in ^{claim 1} ~~any preceding claim~~, including removing air voids within the liquid crystal display by applying pressure to at least one of the plates.
- a 15. A method, as in ^{claim 1} ~~any preceding claim~~, including sealing the exposed cut edges to retain the liquid crystal between the first and second plates.
16. A method, as in Claim 15, including sealing the exposed cut edges using a laser beam arranged to melt the first and second plates together along the exposed cut edges.

- claim 1*
- a* 17. A method, as in ~~Claims 1 to 14~~, including removing an excess region from at least two pre-manufactured liquid crystal displays to leave exposed cut edges, aligning and positioning the exposed cut edges of one of the liquid crystal displays with the corresponding exposed cut edges of an adjacent liquid crystal display, and laminating the liquid crystal displays to form a single display with increased operative area.
18. A method substantially as illustrated in and/or described with reference to any of the accompanying drawings *a*
19. A liquid crystal display manufactured by the method of any preceding claim.
20. A liquid crystal display comprising a pre-manufactured liquid crystal display having a liquid crystal sealed between first and second parallel spaced transparent plates and in which an excess region of the pre-manufactured liquid crystal display has been removed by cutting both of its transparent plates along a common line.
21. A liquid crystal display, as in Claim 20, wherein the first and second plates are cut at an oblique angle.
- claim 20*
- a* 22. A liquid crystal display, as in ~~Claims 20 or 21~~, wherein the cut edges of the transparent plates have been resealed to retain the liquid crystal.
23. A liquid crystal display, as in Claim 22, wherein a laser beam has been used to melt

-23-

the first and second plates together.

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24. A composite liquid crystal display comprising at least two liquid crystal displays in accordance with Claims 20 or ~~21~~ supported with their respective cut edges aligned and abutting.
25. A composite liquid crystal display, as in Claim 24, in which the cut edges are supported in alignment by a transparent lamina adhered over their first transparent plates.
26. A composite liquid crystal display, as in Claim 25, in which the cut edges are additionally supported in alignment by a second lamina adhered over their second transparent plates.
27. A liquid crystal display substantially as illustrated in and/or described with reference to any of Figures 2 to 8 of the accompanying drawings.
28. A composite liquid crystal display substantially as illustrated in and/or described with reference to Figure 9 of the accompanying drawings
29. Apparatus, to aid removal of an excess region of a pre-manufactured liquid crystal display having liquid crystal sealed between first and second parallel spaced transparent plates which form an operative area of the display and in which a groove has been formed in one of the plates between the excess region and an operative

-24-

region of the liquid crystal display, comprising

a fracturing platform having a light polarising layer located between transparent first and second supporting surfaces,

a radiation source located to emit radiation through the fracturing platform,

a raised region arranged on an opposite surface of the fracturing platform to which the light source is located, the raised region being arranged to contact a plate of the liquid crystal display in a region substantially corresponding to the groove in the other plate, and

a ^{polarizing} a light polarising layer disposed between a viewer's eye position and a liquid crystal display located on the fracturing platform.

30. Apparatus, as in Claim 29, wherein the operative area of the liquid crystal display is clamped to the fracturing platform whilst leaving the excess region freedom to move.

a ^{claim 29} 31. Apparatus, as in ~~Claims 29 or 30~~, wherein the raised region is a ridge.

32. Apparatus, substantially as illustrated in and/or described with reference to Figure 10 of the accompanying drawings.

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